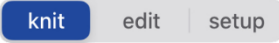# Smart Counters

Contents

knitCompanion Modes

Every project has its own Main Knitting page so you can have many projects going at once and never lose track!

knitCompanion provides three modes for you to work with:

1. **Knit**: Where you will be knitting your project. *See the Getting Started guide for more information.*
2. **Edit**: Customize your project using tools to add highlights and notes, customize markers and counters, add project info, etc. *See the Edit Mode guide for more information.*
3. **Setup**: Overcome challenges such as joining charts together, adding row reminders, and handling the tracking of repeats and shaping instructions. Setup is also where you add a one-tap marker. **Smart Counters** are used to track repeats and shaping instructions and are covered in this guide. *See the Setup Mode guide for information on other Setup features.*

You can switch between Knit, Edit, and Setup modes anytime.

- Tap [knit | edit | setup] to change the mode.
- This guide covers Smart Counters, which are accessed from Setup Mode.
- Access to Setup Mode requires a subscription.
- To enter Setup Mode, tap **Setup** [knit | edit | setup].
- Because of the smaller width of the phone screen or when using slide over and split screen, use the Mode button ⋮ to switch between Knit, Edit, and Setup.

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Smart Counters $

What are Smart Counters?

Smart Counters are used to track repeats and follow additional instructions, such as shaping, when knitting from written or charted patterns.

There are two types of Smart Counters:

- Row Repeats
- Shaping Counters

Pro Tip: To use Smart Counters, the piece must have a one-tap marker.

See the Setup Mode guide for more information on the one-tap marker.

Smart Counters vs. Linked Counters

Smart Counters differ from Linked Counters by the presence of a one-tap marker.
See the Setup Mode guide for more information on the one-tap marker.

Smart Counters

Smart Counters are best for patterns where the pattern rows are written or charted. Lace, cables, texture, and colorwork all work best with Smart Counters.

Smart Counters require the one-tap marker. The one-tap marker keeps your spot in the pattern and Smart Counters add reminders for shaping, color changes, repeats, etc. as you knit each row.

Complex Fabric Pattern
with a one-tap Marker
Use Smart Counters for repeats and shaping

Row 0: k5, p3, k5.
Row 1: k4, p, yo, k2sp, yo, p, k4.
Row 2: p4, k2, p, k2, p4.
Row 3: p5, k3, p5.

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Linked Counters

For simple fabrics such as garter or stockinette, you may not have a one-tap marker. In such instances, Linked Counters work best.

Linked Counters are designed for simple fabric patterns that are not written out and do not have a one-tap marker. Linked Counters track repeats and actions as you knit each row.

See Linked Counters later in this guide for more information.
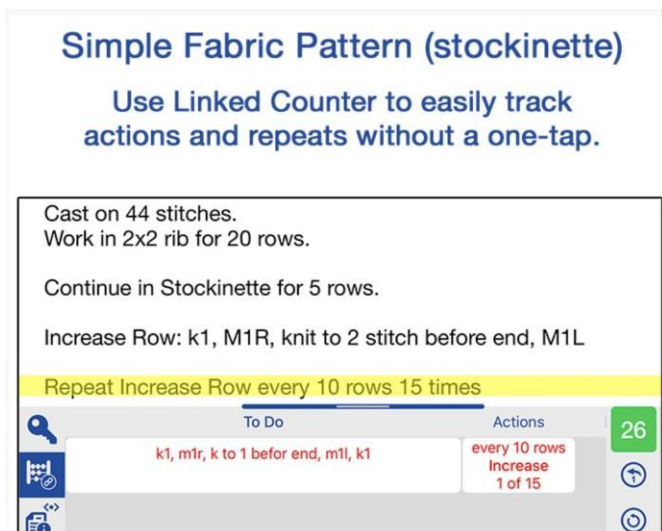
Access Smart Counters

1. Tap **Setup** [knit | edit | setup]

2. Select a piece with a one tap marker.

3. Tap the **Smart Counters** button.

4. Complete the **Piece Settings**:

   - **Knitting Type**: Specify if you are knitting flat or in the round.

   - **First Row Direction**: Specify the direction of the first row.

5. For details on setting up specific types of smart counters, see below.

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Piece Repeat vs. Row Repeat

- **Piece Repeat**: Use to repeat *all rows* of the piece a specific number of times before continuing.
- **Row Repeat**: Use to repeat a *subset of rows* a specific number of times before continuing.

Track Your Progress

To view your progress on a piece, long tap the one-tap marker. knitCompanion keeps track of:

- **Piece Repeats**: The number of times you have worked this piece. In the example below, we are working the first repeat.
- **Total Rows**: Total number of rows worked. In this example, we have worked a total of 17 rows.
  Pro Tip: Shaping Counters are based on Total Rows worked, not the Current Row being worked.
- **Row Repeats**: When repeating a subset of rows, both the number of repeats completed and the total number of repeats required are tracked. In this example, we are on the 3rd repeat out of a total of 8.
- **Frog**: Go back one row at a time.
- **Reset**: Reset back to the first row of the piece.

Piece Repeat

Repeating an entire piece happens automatically. When you get to the last row and tap the one-tap marker, it returns you to the first row of the piece so the next repeat can begin.

Pro-Tip: To repeat a subset of rows, use Row Repeats. See *Row Repeats* below.

Piece Repeat Limit

- The Piece Repeat Limit defaults to zero (0) meaning you want an unlimited number of repeats.
  or
- Set the Piece Repeat Limit if you know exactly how many times you want to repeat the piece and want knitCompanion to stop you from advancing beyond that fixed number. For example, if the pattern says to repeat a chart a total of 3 times. Set the Piece Repeat Limit to 3. Then when you get to the last row of the 3rd repeat, knitCompanion will let you know you are finished.

Row Repeats

Use Row Repeats when you need to repeat a subset of rows a certain number of times before continuing. The piece must have a one-tap marker.
Pro-Tip: To repeat the entire piece, use Piece Repeat Limit. *See Repeat a Piece above*.

In the example below, the knitter is to work rounds 13 and 14 a total of 8 times.

Repeat

Round 13: [ssk, k2, YO, k1, YO, k2, k2tog, p1] 7 times
Round 14: [k9, p1] 7 times
Work rounds 13 and 14 an additional 7 times (rounds 13 and 14 are worked a total of 8 times)

With Row Repeats, you can specify which rows need to be repeated (Rounds 13 and 14) and how many times to repeat that group of rows (8 times).

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Written Instructions and Charts

Row Repeats can be set up for both written instructions and charts. The example below illustrates both formats.

Row Repeat

Rounds 1-6: [k1 tbl, p1] to end
Round 7: [k1 tbl, p1, ssk, YO, k1, YO, k2tog, p1, k1 tbl, p1] 7 times
Round 8: [k1 tbl, p1, k5, p1, k1 tbl, p1] 7 times
Round 9: [k1 tbl, k2tog, k1, YO, k1, YO, k1, ssk, k1 tbl, p1] 7 times
Round 10: [k1 tbl, k7, k1 tbl, p1] 7 times
Round 11: [k2tog, k2, YO, k1, YO, k2, ssk, p1] 7 times
Round 12: [k9, p1] 7 times
Round 13: [ssk, k2, YO, k1, YO, k2, k2tog, p1] 7 times
Round 14: [k9, p1] 7 times
Work rounds 13 and 14 an additional 7 times (rounds 13 and 14 are worked a total of 8 times)
Round 29: [YO, ssk, k5, k2tog, YO, p1] 7 times
Round 30: [k9, p1] 7 times
Round 31: [p1, YO, ssk, k3, k2tog, YO, p2] 7 times
Round 32: [p1, k7, p2] 7 times
Round 33: [p2, YO, ssk, k1, k2tog, YO, p3] 7 times
Round 34: [p2, k5, p3] 7 times
Round 35: [p3, YO, cdd, YO, p4] 7 times
Round 36: [p3, k3, p4] 7 times
Rounds 37-41: [p4, k1, p5] 7 times
Round 42: [p3, cdd, p4] 7 times
Round 43: [p3, k1, p4] 7 times
Round 44: [p2, cdd, p3] 7 times
Round 45: [p2, k1, p3] 7 times
Round 46: [p1, cdd, p2] 7 times
Round 47: [p1, k1, p2] 7 times
Round 48: [cdd, p1] 7 times
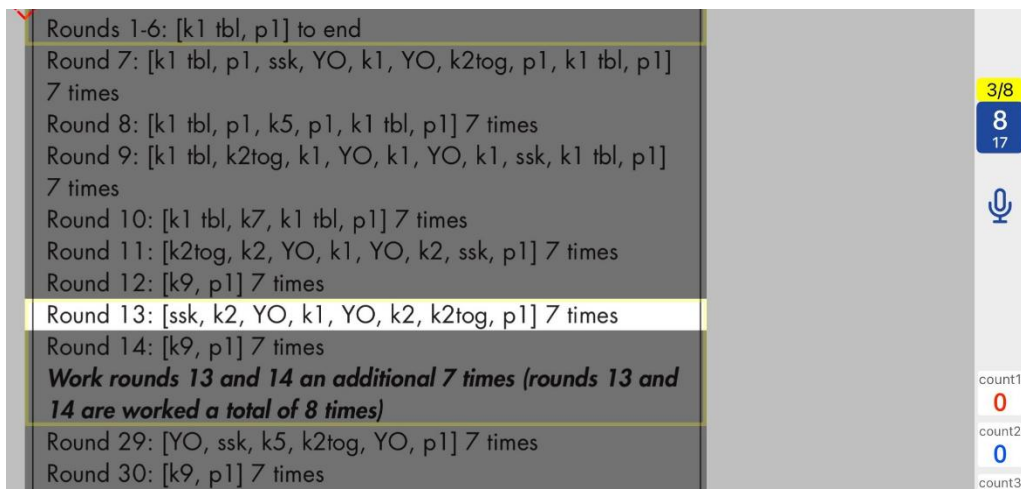Round 49: [k1, p1] 7 times
Round 50: k2tog tbl to end

Each group of repeats is outlined. You are instructed to repeat:

- Row 1 a total of 6 times.
- Rows 13 and 14 a total of 8 times.
- Row 37 a total of 5 times.

Track Automatically

Once Row Repeats are added, they are tracked for you automatically. When you tap the one-tap marker, it will move to the correct *next row* based on the repeat. For example, after working Row 1, when you tap the one-tap marker, it will stay on Row 1 until you have repeated it 6 times.

The instructions tell us to work Rows 13 and 14 a total of 8 times. The one-tap marker is shown on the right.

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Rounds 1-6: [k1 tbl, p1] to end
Round 7: [k1 tbl, p1, ssk, YO, k1, YO, k2tog, p1, k1 tbl, p1]
7 times
Round 8: [k1 tbl, p1, k5, p1, k1 tbl, p1] 7 times
Round 9: [k1 tbl, k2tog, k1, YO, k1, YO, k1, ssk, k1 tbl, p1]
7 times
Round 10: [k1 tbl, k7, k1 tbl, p1] 7 times
Round 11: [k2tog, k2, YO, k1, YO, k2, ssk, p1] 7 times
Round 12: [k9, p1] 7 times
Round 13: [ssk, k2, YO, k1, YO, k2, k2tog, p1] 7 times
Round 14: [k9, p1] 7 times
Work rounds 13 and 14 an additional 7 times (rounds 13 and 14 are worked a total of 8 times)
Round 29: [YO, ssk, k5, k2tog, YO, p1] 7 times
Round 30: [k9, p1] 7 times

- **Yellow Highlight**: The yellow highlights that we are on the 3rd repeat out of a total of 8.
- **Current Row**: The top number is the current row of the piece. In the example below, we are currently working the 8th visible row of the piece.
- **Total Rows**: The bottom number shows the total rows worked for the piece. In the example below, we are working Row 17. This tells us we have completed rows 1-12 and two repeats of Rows 13-14.

  Pro Tip: The Total Rows (bottom number) will be higher than the Current Row if you repeat the piece or repeat rows in the piece.

Add Row Repeats

Pro-Tip: To repeat the entire piece, use Piece Repeat Limit. *See Repeat a Piece above.*

You can add row repeats to any piece, written or charted, that has a one-tap marker.

1. Tap **Setup** knit edit | setup .
2. Select the piece you want to work with.

   Pro Tip: The piece must have a one tap marker.

3. Tap the **Smart Counters** button.

   Pro Tip: If you do not see the Smart Counter button, verify the piece has at least one visible row so there is a one-tap marker.

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4. Set the **Knitting Type** and **First Row Direction** for this piece.

5. Tap ⊕ on the right and select **Row Repeat**. A new repeat is added at the start of the instructions.

6. Select the row or rows to be repeated by dragging the highlight to cover the rows you want to repeat. The From and To Row at the bottom are automatically updated based on your selection.

    -   For written instructions, always start at the top and work down.

    -   For charted instructions, always start at the bottom and work up.

7. Set the number of times to repeat the selected rows.

8. Name the repeat.

9. Optionally, use the Color Picker to select your color.

    See the Working with Color guide for more information on the Color Picker.

10. Repeat steps 5 through 9 to add as many repeats as needed for the piece.

11. Tap the arrow upper left to return to the main setup.

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Shaping Counters Overview

Use Shaping Counters to keep track of additional instructions such as shaping, placing buttonholes, changing yarn colors, etc. The piece must have a one-tap marker.

The example below illustrates the right front section of a sweater, incorporating both waist shaping and a buttonhole band.

Shaping

Setup Row 1: Work Seed Stitch chart twice, PM, work Cable chart once, PM, work Seed Stitch chart twice.

Continue in Pattern. At the same time:

Row 5 begin waist shaping.
> **Waist Shaping:** Decrease 1 st at end of row. Repeat every 2 rows a total of 8 times.

Row 7 begin buttonholes.
> **Buttonhole:** Work 2 stitches in pattern, place buttonhole, work in pattern to end of row. Repeat every 10 rows a total of 9 times.

You are instructed to work the seed stitch and cable pattern across this front section. In addition, you are instructed to begin waist shaping on row 5 and begin buttonholes on row 7.

Track Automatically

Once Shaping Counters are added, they are tracked for you automatically. As you tap the one-tap marker through the pattern, you will get reminders for these instructions in the bottom panel.

Row 5 Reminder

In the example below, you have reached Row 5 and are reminded to work a waist shaping decrease. The reminder tells us to decrease 1 st at the end of the row.

You can monitor your progress for this shaping counter. The display indicates *Step Repeats: 1 of 8*, signifying that you are currently completing the first of eight required waist decreases.
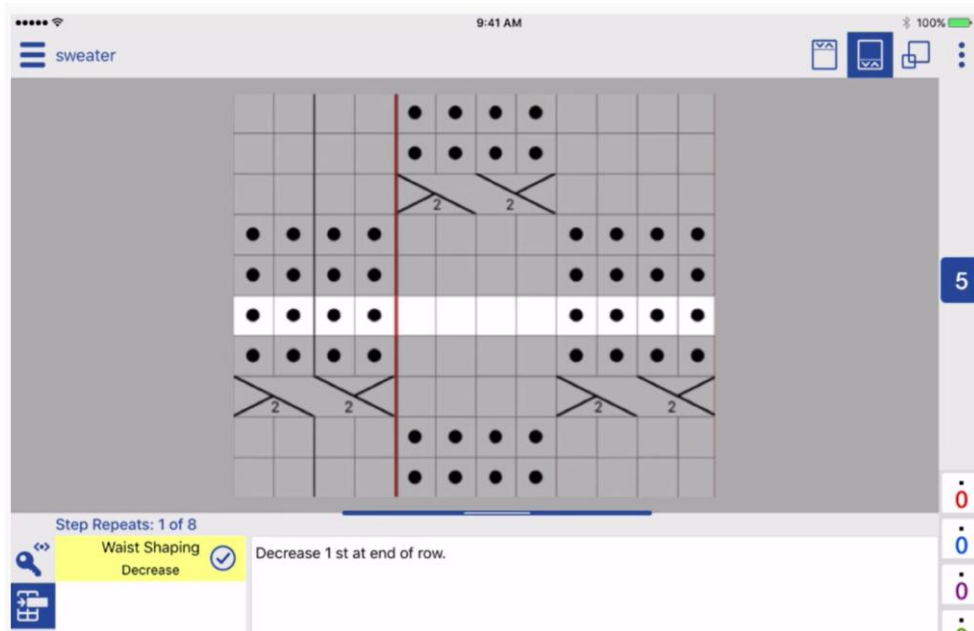
Check Off Smart Counter Steps

Never miss a step! When there are one or more shaping steps to work on a row, knitCompanion prompts you to check them off before you proceed to the next row. This ensures you will not miss a critical step such as shaping, color changes, and other *at the same time* instructions.

Mark the Reminder Complete

Once you have completed the waist decrease on Row 5, tap the checkmark to proceed to the next row.

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Row 7 Reminders

When you reach Row 7, you have two reminders that must be completed.

- Work a waist shaping decrease
- Place a buttonhole
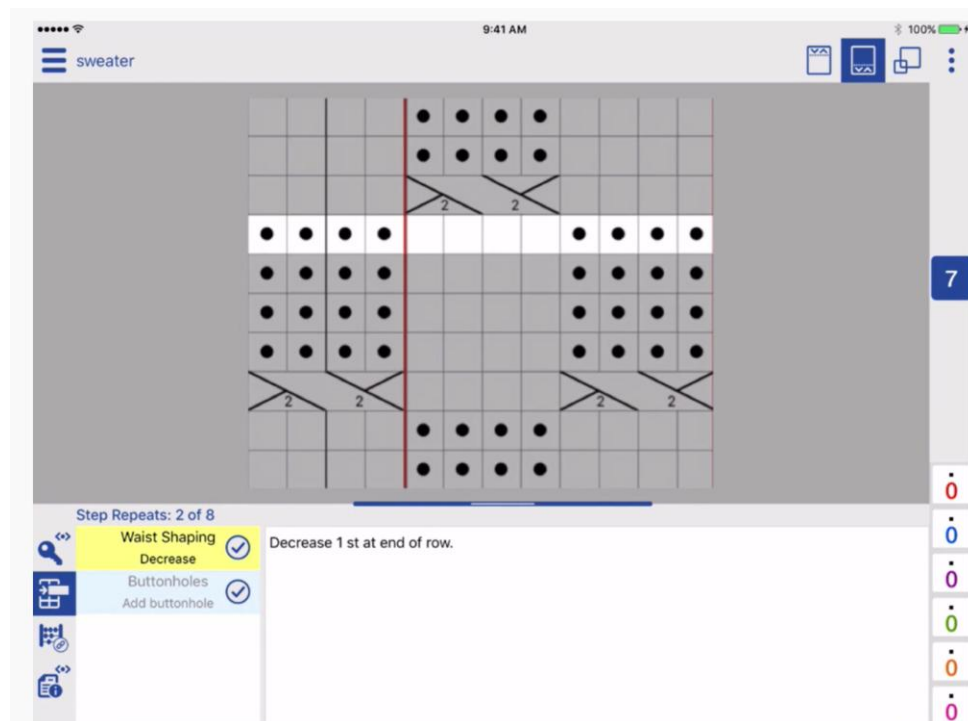
The waist shaping decrease is selected in the above example. The display indicates *Step Repeats: 2 of 8*, signifying that you are currently completing the second of eight required waist decreases.

You can select any reminder in the list to view its details. The buttonhole reminder is selected below. This reminder provides the instructions to place a buttonhole. Its display indicates *Step Repeats: 1 of 9*, signifying that you are currently completing the first of nine required buttonholes.

Step Repeats: 1 of 9

Waist Shaping Decrease ✓

Buttonholes Add buttonhole ✓

Buttonhole: Work 2 stitches in pattern, place buttonhole, work pattern to end of row.
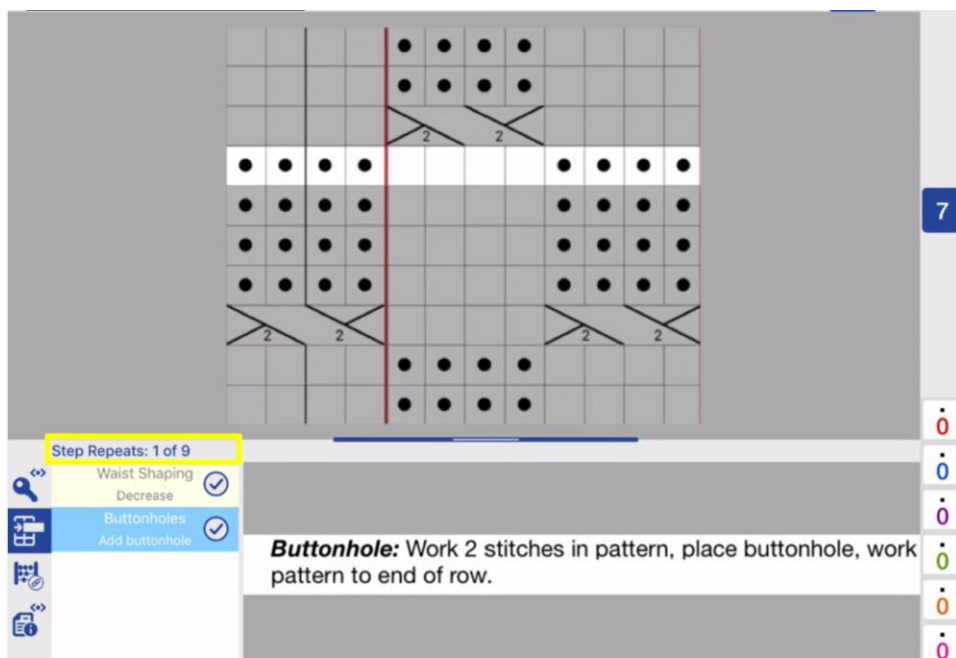
Mark the Reminders Complete

As you complete each reminder, tap its checkmark. Once both reminders are marked as complete, you can proceed to the next row.

Pro Tip: Use the buttons at bottom left to toggle between different types of information such as

the Key 🔑 and the Reminder ▦ ,

Add Shaping Counters

You can add shaping counters to any piece, written or charted, that has a one-tap marker.

1. Tap **Setup** knit edit | setup .

2. Select the piece you want to work with.

   Pro Tip: The piece must have a one tap marker.

3. Tap the **Smart Counters** button.

4. Set the **Knitting Type** and **First Row Direction** for this piece.

5. Tap ⊕ on the right and select **Shaping Counter**. The new Shaping Counter is shown at the bottom left.

6. Tap your new Shaping Counter and set its information.
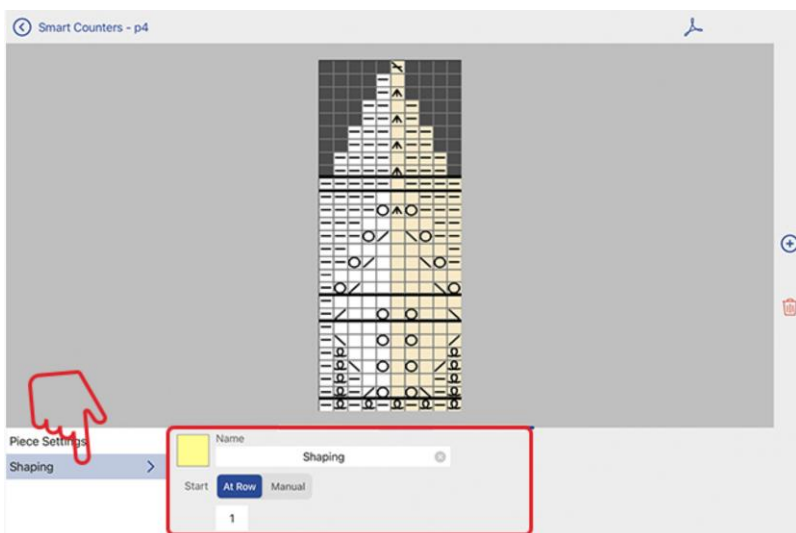
   a. Name this Shaping Counter. For example, Waist Shaping or Place Buttonhole.

   b. Optionally, use the Color Picker to select your color.

      See the Working with Color guide for more information on the Color Picker.

   c. Specify whether this counter should start on a specific row (At Row) or choose Manual if this counter should start at a specific distance (for example, 4″ from the cast on edge).

7. Every Shaping Counter must have at least one Step. Instructions for setting up Steps are below.

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Shaping Counters vs. Steps

Use **Shaping Counters** for *At the Same Time* instructions.

- Our pattern tells us to begin waist shaping on row 5 and begin buttonhole placement on row 7.
- As we work through the pattern, we will be working waist shaping and buttonhole placement *at the same time*.
- We need two shaping counters: one for the waist and one for buttonholes.
- You may define as many Shaping Counters as needed.
- Shaping Counters work in parallel.
- Instructions tell us to shape the waist at the same time as we place the buttonholes. We need to do both at the same time.

Steps are where the instructions go.

- The Shaping Counter includes the steps required to carry out an instruction.
- Our waist shaping instructions tell us to decrease 1 st at the end of the row. We are to do this every 2 rows for a total of 8 times. This will be a step within the waist shaping counter.
- Our buttonhole instructions tell us to work 2 sts, place a buttonhole, work pattern to end of row. We are to do this every 10 rows for a total of 9 times. This will be a step within the buttonhole shaping counter.
- A Shaping Counter can have as many steps as needed.
- Steps within a Shaping Counter happen in order. The first step finishes before the next step starts.
- The Shaping Counter is complete once all its steps are complete.

Steps

1. Every Shaping Counter must have at least one Step. The Step is where the instructions will go. To see a Shaping Counter's steps, tap the arrow as shown below.
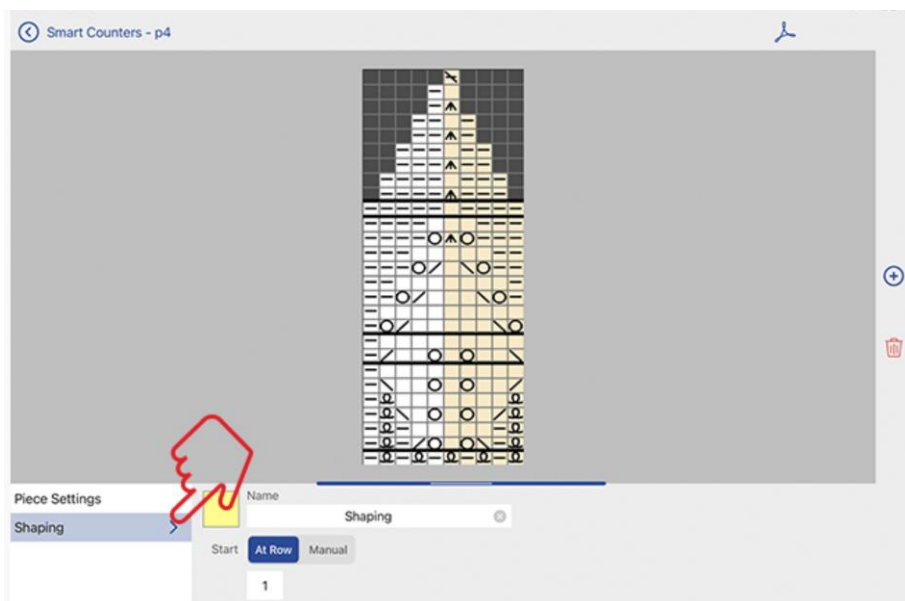
2. Tap the Step inside the Shaping Counter to edit its information.
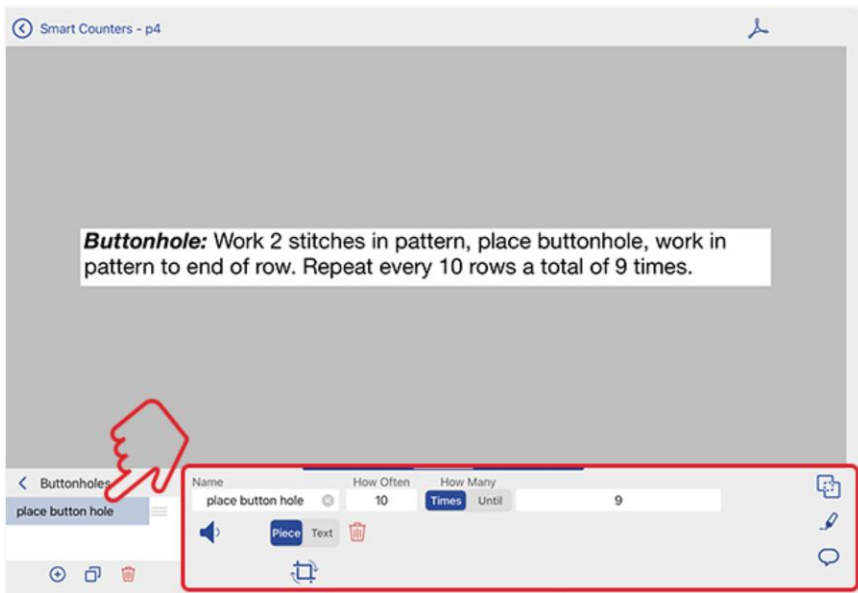
- **Name**: Name the step. Example: place button hole
- **How Often**: Specify how often this reminder should appear. Example: every 10 rows.

- **How Many Times**: Specify how many times it should happen. Example: 9 times

  or

  Use Until if you want the step to continue until you manually stop it.

- **Audio Reminder**: Optionally, tap the Audio button to record an audio reminder.

- Tap Piece or Text to specify where to obtain the instructions.

  Piece

  - Tap **Piece** to crop the instructions directly from the PDF.

    See the Setup Mode guide for more information on cropping.

  - Once the piece is cropped you may:

    Tap to rotate your crop 90 degrees clockwise.

    Tap to modify your cropping.

    Tap Clear to reset your crop and begin again.

  Text

  - Tap **Text** to enter the instructions for this step.

- A step can be **renamed**, **copied** or **deleted** .

  Caution: Delete is permanent.

Add Additional Steps

A Shaping Counter can have as many steps as needed.

- Steps within a Shaping Counter happen in order. The first step finishes before the next step starts.

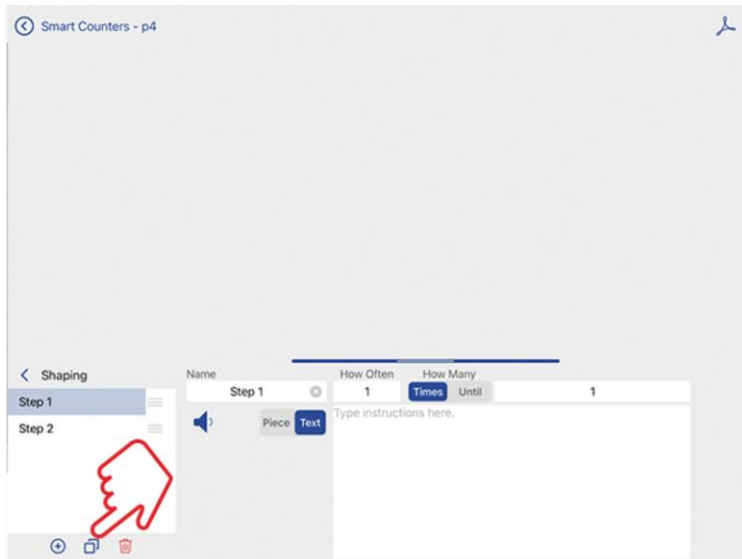- The Shaping Counter is complete once all its steps are complete.

Add a New Step

1. Select one of the steps.

2. Tap ⊕ to add a Step and then follow the instructions above to add the information for the step.
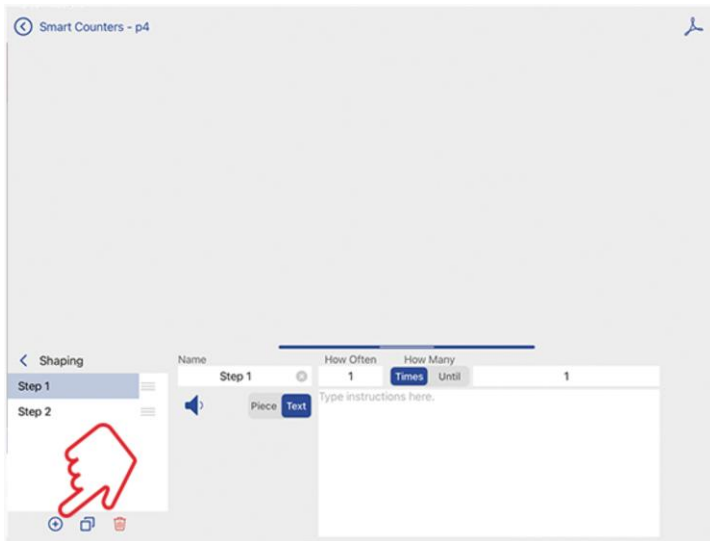
Copy a Step

Tap ⬚ to copy a Step

All information for the step is copied: Name, How Often, How Many, Audio, and the Instruction.

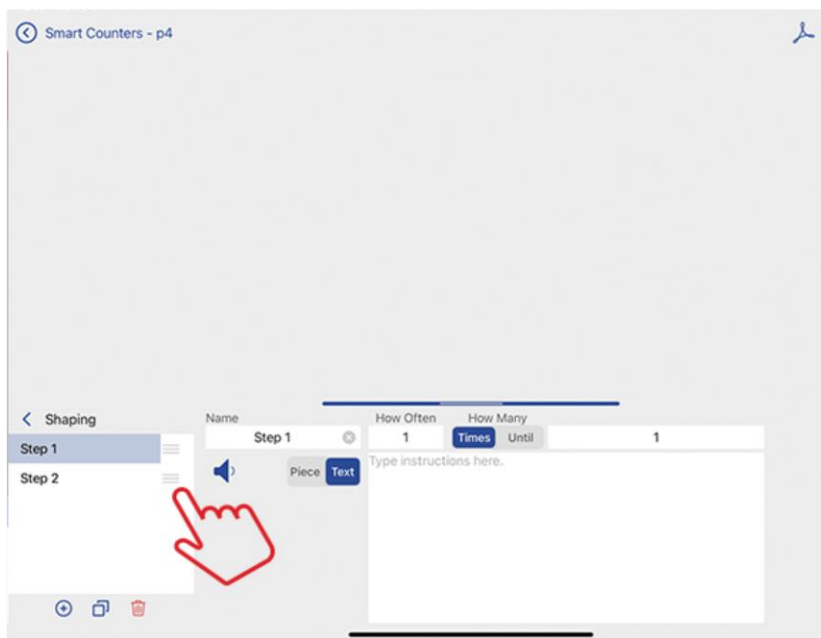knitCompanion
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Delete a Step

Tap 🗑 to delete a Step.

Reorder Steps

Because steps within a Shaping Counter happen in order, you may find it necessary to reorder the steps.

- To reorder steps, drag the step using the grey handles to the right of its name.
- Steps may be moved up or down to adjust their order as needed.

Linked Counters

Linked Counters are designed for simple fabric patterns that are not written out and *do not have a one-tap marker*. For simple fabrics such as garter or stockinette, you may not have a one-tap marker. In such instances, Linked Counters work best.

You can use Linked Counters even if there are no row-by-row instructions to follow, a one-tap marker is not required.

Linked Counters are counters that are joined (linked) to a single button so you can advance a group of counters with a single tap. You can keep track of several things at the same time such as various repeats of row instructions and shaping or yarn changes over the span of many rows.

Sample Instructions

The following sample instructions are referenced in this Linked Counters section. The sample instructions include directions for waist shaping and buttonhole placement that are to be worked *at the same time*. This results in two actions.

1. Buttonhole Placement
   - Start Buttonhole Placement on Row 3.
   - Instruction: Work 2 sts, place buttonhole, work to end.
   - Place a buttonhole every 10 rows for a total of 7 times.
2. Waist Shaping
   - Start Waist Shaping on Row 5.
   - Instruction: Decrease 1 stitch at the end of the row.
   - Work decreases every 2 rows a total of 8 times.

Types of Linked Counters

Linked Counters track repeats and actions as you knit each row. There are two types of Linked Counters:

- Repeat Counters
- Action Counters

Repeat Counters

Repeat Counters loop through a number range. The instructions tell us to start buttonhole placement on Row 3 and to place a buttonhole every 10 rows for a total of 7 times.

1. Tap **Edit** at the top.

2. Tap the **Linked Counters** button on the right.

3. Tap and select **Repeat**.

4. Specify the details for the counter.

   a. Name this Linked Counter.

   b. Optionally, use the Color Picker to select your color.

   See the Working with Color guide for more information on the Color Picker.

   c. **From / To**: Specify the number range.

   Example: We want a reminder to place a buttonhole every 10 rows. So, our range is 1 - 10.

   d. **How Many Times**: Specify the number of times to repeat. Use zero for unlimited repeats.

   Example: We are to place a buttonhole 7 times.

   e. **Show**: Indicate if you want to display the repeat information.

   On: Toggle Show to ON and the repeat information displays.

   Off: Toggle Show to OFF and the repeat information does not display.

f. **Start Row**: The starting row number.

Example: We are to place our first buttonhole on Row 3.

or

Manual Start: Toggle On if you want to manually start the counting after a specific distance.

g. To use your Linked Counters, tap Knit at the top. *See below for more information on using Linked Counters.*

Action Counters

Action Counters show a reminder at a given interval. The instructions tell us to start Waist Shaping on Row 5 and to work this decrease every 2 rows a total of 8 times.

1. Tap **Edit** at the top.

2. Tap the **Linked Counters** button on the right.

3. Tap ⊕ and select **Action**.

4. Specify the details for the counter.

| Waist		name	action
		Waist	Dec 1 st end of row
1-10	how many times	how often	show
	8	2	🟢
⊕ 🗑 ↻	start row	manual start	
	5	⚪	

a. Name this Linked Counter.

b. Optionally, use the Color Picker to select your color.

See the Working with Color guide for more information on the Color Picker.

c. **Action**: Specify the action to take.

Example: Our instruction is to *Dec 1 st end of row*.

d. **How Many Times / How Often**: Specify how many times and how often this action should happen.

Example: We are to work a waist decrease every 2 rows (how often) a total of 8 times.

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e. **Show**: Indicate if you want to display the action information.

   On: Toggle Show to ON and the action information displays.

   Off: Toggle Show to OFF and the action information does not display.

f. **Start Row**: The starting row number.

   Example: We are to begin waist shaping on Row 5.

   or

   Manual Start: Toggle On if you want to manually start the counting after a specific distance.

g. To use your Linked Counters, tap **Knit** at the top. *See below for more information on using Linked Counters.*

Using Linked Counters

In Knit Mode, tap the Linked Counters button in the bottom panel (it is below the key). Our linked counters display. See Sample Instructions above for details on our sample pattern.
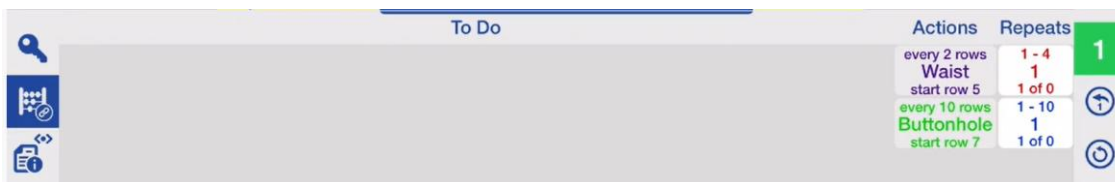
Bottom panel:

- The big green button shows that we are on Row 1.
- The To Do list appears in the center. It is blank indicating there is no action to perform on Row 1.
- Action and Repeat instructions are shown at the right.

- Tap ⬆ to frog back one row for each tap. It steps you back through the linked counters in reverse order.

- Tap ⟳ to reset the linked counter to the beginning. This is useful when you want to make a second sleeve just like the first sleeve.

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We have advanced to Row 5.
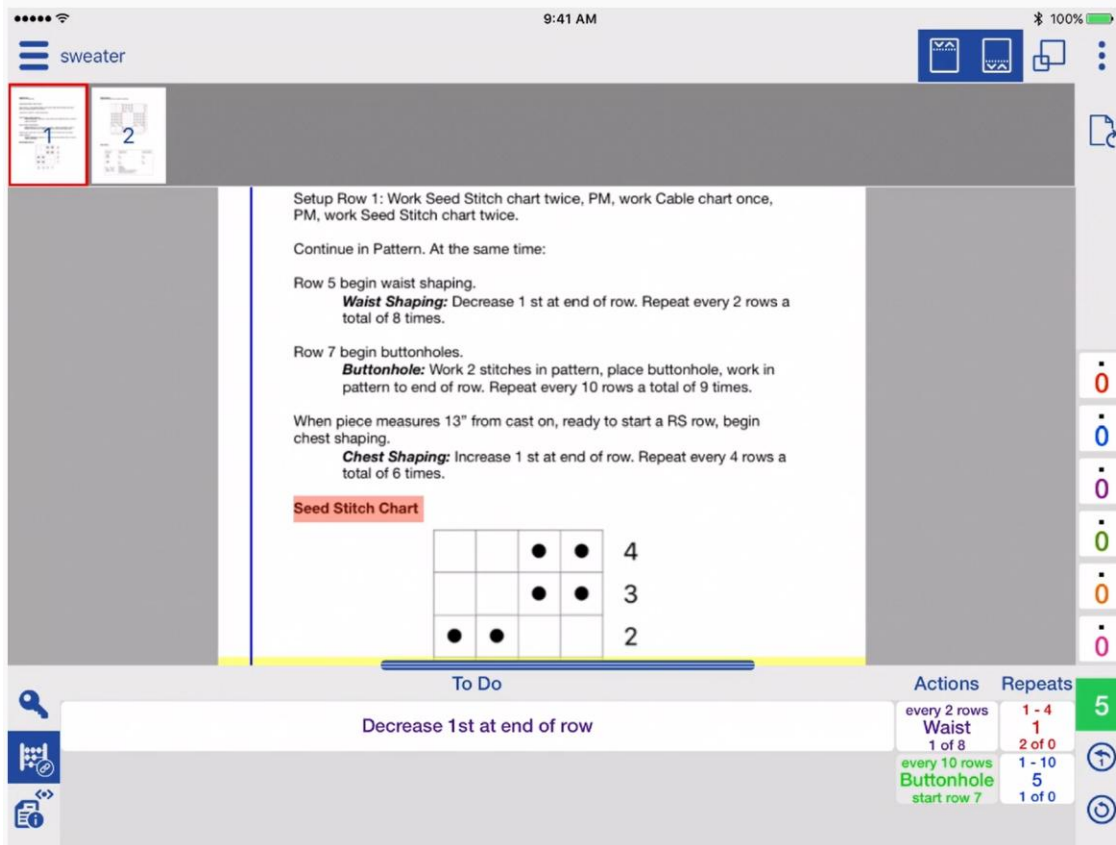
- The big green button shows that we are on Row 5.
- The To Do list shows the instructions we are to follow on this row.
  - We are to decrease one stitch at the end of the row.
  - The action counter tells us to work Waist Shaping every 2 rows and we are working the first of eight buttonholes (1 of 8).

We have advanced to Row 7.

- The big green button shows that we are on Row 7.
- There are two items in our To Do list: We need to do our 2nd waist shaping and place our first buttonhole.
- As you tap the large green button, it advances all your linked counters together.

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Advance a Linked Counter

Once a linked counter is set up, when you tap the large green button it advances all your linked counters together.

Long Tap

If the To Do item has a long description, long tap the To Do to see the full description.

Add a New Counter Later

You can add new counters later, but they must start after your current row. If you have advanced the linked counters and realize you need to adjust a counter that has already

started, tap to reset the counter.

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